

Title (en)

HYBRID SPEAKER

Title (de)

HYBRID-LAUTSPRECHER

Title (fr)

HAUT-PARLEUR HYBRIDE

Publication

EP 3370436 A4 20190814 (EN)

Application

EP 17821775 A 20170929

Priority

- KR 20160155158 A 20161121
- KR 2017011032 W 20170929

Abstract (en)

[origin: EP3370436A1] The present invention is directed to a hybrid speaker, comprising a plurality of vibration wings moving in an arch path for disappearance control in a zone of low tone and extension/reduction of high frequency. The hybrid speaker has an electro-magnetic high resolution tweeter and a dynamic woofer coaxially coupled to each other, wherein the tweeter has an open type active vibration plate and wherein the characteristics of mid tone and high tone are flattened and smoothed in the dynamic woofer. Therefore, the present invention provides a multi-way speaker adapted to the attainment of wideband synthetic characteristics minimizing the distortion due to phase interference occurring in a non-coaxial state. Accordingly, it is easy to control wide frequency and it is suitable for the attainment of high resolution in a wideband. As a result, the present invention could be used in industrial field.

IPC 8 full level

H04R 1/24 (2006.01); **H04R 7/02** (2006.01); **H04R 9/02** (2006.01)

CPC (source: EP KR US)

H04R 1/24 (2013.01 - EP KR US); **H04R 7/02** (2013.01 - EP KR US); **H04R 9/02** (2013.01 - EP US); **H04R 9/025** (2013.01 - KR US);
H04R 9/046 (2013.01 - US); **H04R 9/063** (2013.01 - US); **H04R 2209/022** (2013.01 - KR US)

Citation (search report)

- [YA] KR 200476280 Y1 20150213
- [YA] KR 101596894 B1 20160223 - YOO OK JEUNG [KR]
- [Y] KR 101596891 B1 20160223 - YOO OK JEUNG [KR]
- [A] KR 20160048304 A 20160504 - ALMUS CORP [KR]
- See references of WO 2018093043A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3370436 A1 20180905; EP 3370436 A4 20190814; EP 3370436 B1 20220803; CN 108353223 A 20180731; CN 108353223 B 20191203;
KR 101909234 B1 20181017; KR 20180057045 A 20180530; US 10555070 B2 20200204; US 2019268688 A1 20190829;
WO 2018093043 A1 20180524

DOCDB simple family (application)

EP 17821775 A 20170929; CN 201780002361 A 20170929; KR 20160155158 A 20161121; KR 2017011032 W 20170929;
US 201715768607 A 20170929